

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A method for providing redundancy and recovery for a first memory device designated primary by utilizing a second memory device designated backup, the method comprising:

copying contents of the primary memory device to the backup memory device at specified intervals;

detecting an uncorrectable error in data received from or sent to the first memory device designated primary; and

switching the designation of the first memory device from primary to backup and the designation of the second memory device from backup to primary in response to said detecting;

testing the memory device now designated backup after said switching;

marking pages or parts of the memory device now designated backup as bad if said testing so indicates; and

notifying the control system that the memory device now designated backup is bad if said testing so indicates.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) An apparatus for providing memory redundancy and recovery in a system including a first memory device designated primary and a second memory device designated backup, the apparatus comprising:

a memory device contents copier coupled to said first memory device designated primary and to said second memory device designated backup;

an interval specifier coupled to said memory device contents copier;

an uncorrectable error detector coupled to said first memory device designated primary and said second memory device designated backup; and

a memory device designation switcher coupled to said uncorrectable error detector;

a switched memory device tester coupled to said first memory device designated primary and to said second memory device designated backup;

a tested-bad memory device page or part marker coupled to said switched memory device tester;

a memory device in-service placer coupled to said tested-bad memory device page or part marker; and

a tested-bad memory device notifier coupled to said switched memory device tester.

7. (Currently Amended) The apparatus of claim 6, further including a boot-time memory device designator coupled to said first memory device designated primary and to said second memory device designated backup.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) An apparatus for providing redundancy and recovery for a first memory device designated primary by utilizing a second memory device designated backup, the apparatus comprising:

means for copying contents of the primary memory device to the backup memory device at specified intervals;

means for detecting an uncorrectable error in data received from or sent to the first memory device designated primary; and

means for switching the designation of the first memory device from primary to backup and the designation of the second memory device from backup to primary in response to said detecting;

means for testing the memory device now designated backup after said switching;

means for marking pages or parts of the memory device now designated backup as bad if said testing so indicates; and

means for notifying the control system that the memory device now designated backup is bad if said testing so indicates.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) A system for providing memory redundancy and recovery, the system comprising:
a first memory device designated primary;
a second memory device designated backup;
one or more processors coupled to said first memory device designated primary and to said second memory device designated backup;
an operating system including:
a memory device contents copier coupled to said first memory device designated primary and to said second memory device designated backup;
an interval specifier coupled to said memory device contents copier;
an uncorrectable error detector coupled to said first memory device designated primary and said second memory device designated backup; and
a memory device designation switcher coupled to said uncorrectable error detector;
a switched memory device tester coupled to said first memory device designated primary and to said second memory device designated backup;
a tested-bad memory device page or part marker coupled to said switched memory device tester;
a memory device in-service placer coupled to said tested-bad memory device page or part marker;
and
a tested-bad memory device notifier coupled to said switched memory device tester.

21. (Cancelled)

22. (Cancelled)

23. (Currently Amended) The system of claim 2220,
wherein said operating system further comprises:

a boot-time memory device designator coupled to said
first memory device designated primary and to said second
memory device designated backup.

24. (Cancelled)

25. (Currently Amended) A program storage device
readable by a machine, tangibly embodying a program of
instructions executable by the machine to perform a method for
providing redundancy and recovery for a first memory device
designated primary by utilizing a second memory device
designated backup, the method including:

copying contents of the primary memory device to the
backup memory device at specified intervals;

detecting an uncorrectable error in data received
from or sent to the first memory device designated
primary; and

switching the designation of the first memory device
from primary to backup and the designation of the second
memory device from backup to primary in response to said
detecting;

testing the memory device now designated backup after
said switching;

marking pages or parts of the memory device now
designated backup as bad if said testing so indicates; and

notifying the control system that the memory device
now designated backup is bad if said testing so indicates.